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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,671	03/24/2006	David John Hill	124-1154	5058
	7590 12/28/2007	EXAMINER		
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR			KIM, ELLEN E	
ARLINGTON,			ART UNIT	PAPER NUMBER
	•		2874	
			MAIL DATE	DELIVERY MODE
•			12/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

9) The specification is objected to by the Examiner. 10) The drawing(s) filed on			Application No.	Applicant(s)
Ellen Kim 2874			10/573,671	HILL ET AL.
Ellen Kim		Office Action Summary	Examiner	Art Unit
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DETAILED ACTION

Response to Arguments

Applicant responses in the response filed on 9/17/07 that the term "fiber-optic point sensors" and "distributed fiber-optic point sensor" are well known in the art, and that examples of those terms are provided in the original specification.

Since Applicant fails to establish any definition of "fiber-optic point sensors" and "distributed fiber-optic point sensor" in the claim and specification, for the examination purposes, any fiber optic sensors are considered as "fiber-optic point sensors" and "distributed fiber-optic point sensor".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-10, 12, 15-16 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yurak et al [USPAT 5,140,154, Applicant's submitted prior art].

Yurak et al disclose an optical device comprising: at least two fiber-optic point sensors 30's in fig. 6A-6D; and

Distributed fiber-optic sensor 10a linking said at least two fiber-optic point sensors, wherein said sensor array provides an array output of sensed data from said at

least two fiber-optic point sensors and said distributed fiber-optic sensor [inherently shown].

The distributed fiber-optic sensor 10a is delivering and pass out optical signal.

In re claim 2, Yurak et al teach at column 4, lines 34-55 that the output of an array 3' can be processed so as to effectively only interrogate the sensor portions of the array.

In re claims 2-4, fig. 6A-6D shows all the detectors including fiber-optic cables 22s, and wire cables 10s.

In re claim 5, the front drawing shows that the sensor unit 30' shows optical fiber wound into a flexural disc.

In re claims 8-10, reflective interferometers 14 are shown.

In re claim 12, time-division multiplexing is taught at column 3, lines56-62.

In re method claims, the claimed method steps are inherently shown by the Yurak et al reference.

Note that it has been held that a preamble, such as "surveillance system" is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

Claims 1-7 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Goldner et al [USPUB 20060120675].

Goldner et al disclose an optical device comprising array of geophones [different sensors as shown in fig. 2. An optical fiber sensor connecting two optical fiber sensors can be considered as distributed fiber optic sensor. Goldner et al also teach in ¶0013 and 0061 the interrogating system.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldner et al.

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Goldner et al disclose every aspect of claimed invention except for the pulsed reflectometric interferometric interrogation system and Rayleigh-backscatter interrogation system.

Official Notice is taken for the pulsed reflectometric interferometric interrogation system and Rayleigh-backscatter interrogation system is old and well known in the art for the purpose of high coupling efficiency. See In Re Malcolm 1942 C.D. 589:543 O.G. 440 MPEP 706.02 (a).

Therefore, it would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Goldner et al device to include for the pulsed reflectometric interferometric interrogation system and Rayleigh-backscatter interrogation system for the purpose of higher coupling efficiency of the device.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

In formation regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

For all official patent application related correspondence for organizations reporting to the Commissioner of Patents:

- Correspondence that is transmitted by facsimile must be directed to the central facsimile number, (703) 872-9306.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Further references of interest are cited on Form PLO-892, which is attachment to this office action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen Kim whose telephone number is (571) 272-2349. The examiner can normally be reached on Monday through Thursday.

Ellen E. Kim
Primary Examiner
December 26, 2007/EK